

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
9 October 2003 (09.10.2003)(10) International Publication Number
WO 03/082509 A1

- (31) International Patent Classification⁷: **B23K 9/095 // G05D 7/06**
- (21) International Application Number: **PCT/NO03/00107**
- (22) International Filing Date: **2 April 2003 (02.04.2003)**
- (25) Filing Language: **Norwegian**
- (26) Publication Language: **English**
- (30) Priority Data:
20021557 2 April 2002 (02.04.2002) NO
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

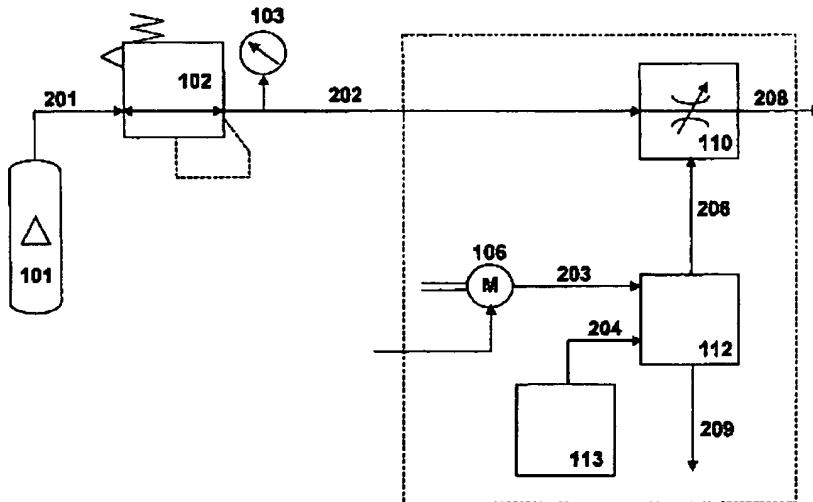
— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- (54) Title: **-WELDING MACHINE**

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- (57) Abstract: The inventive system and method allows the control of shielding gas in an electric welding apparatus having automatic wire feed by controlling the flow rate of the shielding gas as a function of the wire feeding speed and/or the welding current obtained. A control circuit (112) receives an input signal (203) that is representative for the wire feeding speed and/or the welding current, and issues, in response to the input signal (203), a control signal (206) to a controllable flow control valve (110) in a gas supply line (201, 202, 208), which passes shielding gas from a tank (101), via a regulator valve (102), to a discharge nozzle of the welding apparatus welding gun. An adjusting unit (113) provides an operator with an interface which permits adjustments of the parameters that determine the flow rate function.